

Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) EP 0 942 568 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
12.04.2000 Bulletin 2000/15

(51) Int Cl.7: H04L 9/32, H04B 7/26,
H04L 29/06

(43) Date of publication A2:
15.09.1999 Bulletin 1999/37

(21) Application number: 99301079.2

(22) Date of filing: 15.02.1999

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(72) Inventor: Ramasubramani, Seetharaman
San Jose, CA 95129 (US)

(74) Representative: Suèr, Steven Johannes et al
Ablett & Stebbing,
Caparo House,
101-103 Baker Street
London W1M 1FD (GB)

(30) Priority: 17.02.1998 US 24928

(71) Applicant: Phone.Com, Inc.
Redwood City, CA 94063 (US)

(54) Centralized certificate management system for two-way interactive communication devices in data networks

(57) The present invention discloses a method for managing centralized certificates in a proxy server device (114) for a plurality of thin client devices (302, 304, 306) coupled thereto through a data network (102). A user account database, accessible by the proxy server, comprises a plurality of user accounts with each of the thin client devices being associated with one or more of the user accounts. Each of the user accounts comprises a device ID (316), a list of public and private keys (326) assigned to the user account, and a list of certificates (320) assigned to the user account. A certificate man-

agement module reserves a fixed number of free certificates signed by a Certificate Authority and their respective private keys in a certificate database (328) and frequently updates the free certificate according to a certificate updating message. Whenever a user account is created for a thin client device, the certificate management module fetches one or more free certificates from the certificate database and associates the fetched certificate(s) to the created account and at the same time creates new free certificates with the Certificate Authority to fill in the certificate database.

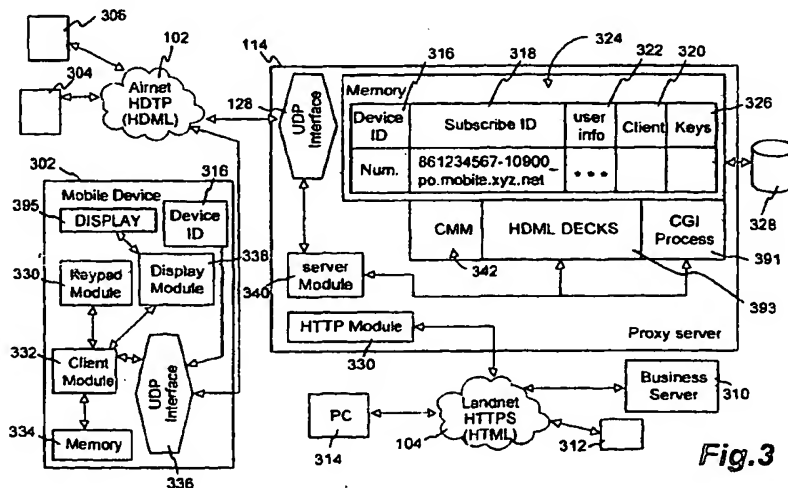


Fig.3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 30 1079

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 5 586 260 A (HU WEI-MING) 17 December 1996 (1996-12-17) * the whole document *	1,6	H04L9/32 H04B7/26 H04L29/06
A	AZIZ A ET AL: "PRIVACY AND AUTHENTICATION FOR WIRELESS LOCAL AREA NETWORKS A SECURE COMMUNICATIONS PROTOCOL TO PREVENT UNAUTHORIZED ACCESS" IEEE PERSONAL COMMUNICATIONS, US, IEEE COMMUNICATIONS SOCIETY, vol. 1, no. 1, 1 January 1994 (1994-01-01), pages 25-31, XP000460718 ISSN: 1070-9916 * page 26, right-hand column * * page 29, left-hand column *	1,6	
A	LAI M K F ET AL: "A MOBILE SUBSCRIBER PROXY PRESERVING WRITER-TO-READER MESSAGE SECURITY" ANNUAL MILITARY COMMUNICATIONS CONFERENCE, US, NEW YORK, IEEE, vol. 15TH, 1996, pages 461-467, XP000697323 ISBN: 0-7803-3683-6 * page 464, right-hand column; figure 1 *	1,6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H04L
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 14 February 2000	Examiner Carnerero Álvaro, F
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : technological background O : non-written disclosure P : intermediate document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category			

EPO FORM 1503 03.02 (P4/C21)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 30 1079

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on

The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-02-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5586260 A	17-12-1996	NONE	

6500 MBUS UDS

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

